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MM92/1106  
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EXAMINER  
GONZALEZ, J

ART UNIT  
2834

PAPER NUMBER

DATE MAILED: 11/06/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/770,676

Applicant(s)

MENZ ET AL.

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## DETAILED ACTION

### *Specification*

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
2. The claims are objected to because the lines are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).
3. Content of Specification needs to be in the following format including subtitles.
  - (a) Title of the Invention: See 37 CFR 1.72(a). The title of the invention should be placed at the top of the first page of the specification. It should be brief but technically accurate and descriptive, preferably from two to seven words.
  - (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
  - (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
  - (d) Reference to a "Microfiche Appendix": See 37CFR 1.96(c) and MPEP § 608.05. The total number of microfiche and the total number frames should be specified.
  - (e) Background of the Invention: The specification should set forth the Background of the Invention in two parts:
    - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
    - (2) Description of the Related Art: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are

solved by the applicant's invention. This item may also be titled "Background Art."

- (f) Brief Summary of the Invention: A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. This item may also be titled "Best Mode for Carrying Out the Invention." Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet. (37 CFR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps.
- (j) Abstract of the Disclosure: A brief narrative of the disclosure as a whole in a single paragraph of 250 words or less on a separate sheet following the claims.
- (k) Drawings: See 37 CFR 1.81, 1.83-1.85, and MPEP § 608.02.
- (l) Sequence Listing: See 37 CFR 1.821-1.825.

***Drawings***

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "20" has been used to designate both central boring and shaft and character "12" has been used to designate both base and disc plate and character "30" has been used to designate both side walls and parallel partitions and character "44" has been used to designate both hole and recess and character "78" has been used to designate both surface and underside. Correction is required.
5. The drawings are objected to because some of the drawings details are too dark, thus making the understanding of the invention difficult (e.g. spring 48 in figure 5). Correction is required. More clear drawings are required.
6. In figure 13, the retaining element (26) and the grooves (98) seemed to be the same component. Correction is required.
7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore:  
  
In claim 1, the carbon brush extending outward from the base plate, the commutator, the retaining plate been shifted and engaged with a recess must be shown;  
  
In claim 2, the base plate becoming disengaged from the carbon brush;  
  
In claim 3, the retaining element shifting with a guide and the base plate being perpendicular to the axis of the brush;  
  
In claim 5, the brush been retracted;  
  
In claim 6, the pin becoming wedged in the recess;  
  
In claim 15, the inner section that extends along the base;

In claim 16, the plate-like metal extending between the brush and the base or partition;

**ALL OF THE FEATURES** must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

From the specification and from the drawings, it is not clear what is exactly the new invention/features of the device. The invention seems to claimed a movable retainer that is shifted against the force of the spring, yet such mechanism is not shown in the drawings. Moreover, identifying such important components like the springs is difficult since they are hard to see (figure 5) in the drawings. Also, according to the position of the springs (figure 1), it seem to be misleading since the position of the springs are not pushing the brushes against the commutator (assuming shaft 20 is the commutator), but pushing the brushes' springs against each other. Drawings that would show the disclosed invention **CLEARLY** are required.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, how is the retaining plate shifted?

It should be emphasized that "apparatus claims must be structurally distinguishable from the prior art." MPEP 2114. In *re Danly*, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of structure rather than function. In *Hewlett-Packard Co v Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: "Apparatus claims cover what a device is, not what it does." (emphases in original). To emphasize the point further, the court added: "An invention need not operate differently than the prior art to be patentable, but need only be different" (emphases in original). That is, in an apparatus claim, if a prior art structure discloses all of the structural elements in the claim, as well as their relative juxtaposition, then it reads on the claim, regardless of whether or not the function for which the prior art structure was intended is the same as that of the claimed invention. From the claims, there is no structure as to how the retaining element retracts the brush. In the claims, there is only functional language.

In claim 2, how is it possible that when the base is covered, the retaining element is disengaged? How that mechanism functions?

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In claim 3, what is meant by "essentially perpendicular"? Are the guide and the base plate tilted at different angles?

In claim 4, what is considered "the direction" of the brush? Up? Down? Left?

In claim 5, how the carbon brush is retracted? What makes the brush become disengaged?

In claim 7, what is the "first section" that crosses over into a center section? From the figures, it seems like if the first section and the second section are the same. Is the second section (46) the spring?

In claims 11 and 14, the bent sections are parallel to the base and parallel to the partitions. According to figure 6, they are perpendicular.

In claim 15, what is the outer section (76) extending to? "First" what?

In claim 16, what is "this element" connected to the U-shaped metal? How can the metal element be penetrated or not?

12. Regarding claim 17, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

13. Regarding claim 9, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.



***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1, 3, 4, 6 are rejected, as understood, under 35 U.S.C. 102(b) as being anticipated by Rubinchik (Patent # 5,689,148).

Rubinchik discloses a base plate 20 for at least a carbon brush 86d, a spring element 88b, a retaining element 100 that can be shifted (see figure 17), a commutator (see figure 14), two parallel wall-like partitions (see figure 8) with pin extensions 46.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

16. Claims 11 and 13-17 are rejected, as understood, under 35 U.S.C. 102(e) as being anticipated by Prell et al.

Prell et al discloses a brush 34, a brush holder having a base plate, a spring 50, a commutator (see figure 3), a retaining plate 42 and an U-shaped carbon brush guide (see figure 1) and plate-like element 16 extending between the brush 34 and the base plate 14 wherein this element is connected to the u-shaped element 24 (see figure 1).

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 2, 5, 7-10 and 12 are rejected, **AS UNDERSTOOD**, under 35 U.S.C. 103(a) as being unpatentable over Rubinchik (Patent # 5,689,148) in view of Prell et al.

Rubinchik discloses a base plate 20 for at least a carbon brush 86d, a spring element 88b, a retaining element 100 that can be shifted (see figure 17), a commutator (see figure 14), two parallel wall-like partitions (see figure 8) with pin extensions 46. However, Rubinchik does not disclose that bend end extend through the base

On the other hand, Prell et al discloses for the purpose of providing a spring mechanism for keeping the brush in contact with the commutator thus reducing space within the motor, a first outer section 24 that extends from the base 14 and bent sections 20 that extend through the base (see figure 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design a brush holder as disclosed by Rubinchik and to modify the invention by using bending extensions for the purpose of providing a spring mechanism for keeping the brush in contact with the commutator thus reducing space within the motor as disclosed by Prell et al.

**Conclusion**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Jcg

November 1, 2001

  
NESTOR RAMIREZ  
SUPERVISOR PATENT EXAMINER  
TECHNOLOGY CENTER 2000